



DEPARTMENT OF DEFENSE TRAINING TRANSFORMATION IMPLEMENTATION PLAN

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Executive Summary

The dramatic transformation of America's strategic environment has had a major impact on our military forces, and demands an equally dramatic transformation in how we prepare the forces for combat and noncombat operations. Emphasis has shifted from deliberate to adaptive war planning, and from permanent organizations and large hierarchies to smaller, highly-distributed joint and combined forces and standing joint task forces that integrate service capabilities at the lowest levels. To transform the total force and meet combatant commanders' needs in this new environment, we need to transform the way we conduct training.

Training must now prepare the force to learn, improvise, and adapt to constantly changing threats in addition to executing doctrine to standards. To achieve this challenge, this *Training Transformation Implementation Plan* provides a systematic and ongoing process for Training Transformation. The Training Transformation initiative is designed to provide dynamic, capabilities-based training for the Department of Defense (DoD) in support of national security requirements across active and Reserve components of the Services; Federal agencies; international coalitions; international organizations; and state, local, and nongovernmental organizations. Overall, Training Transformation will accomplish the following objectives:

- Strengthen joint operations by preparing forces for new warfighting concepts
- Continuously improve joint force readiness by aligning joint education and training capabilities and resources with combatant command needs
- Develop individuals and organizations that intuitively think jointly
- Develop individuals and organizations that improvise and adapt to emerging crises
- Achieve unity of effort from a diversity of means

Diversity of means are drawn from active and Reserve components of the Services; Federal agencies; international coalitions; international organizations; and state, local, and nongovernmental organizations. The new strategic environment requires orchestration of this wider diversity of means and a broader, more inclusive definition of "jointness."

In the Department's *Transformation Planning Guidance*, Secretary Rumsfeld stated, "We must transform not only the capabilities at our disposal, but also the way we think, the way we train, the way we exercise, and the way we fight." Training Transformation begins by changing the way people think and the way organizations operate. Creating, storing, imparting, and applying new knowledge throughout the force, individually and collectively, will foster this change. Three capabilities form the foundation for Training Transformation. These capabilities are designed to prepare individuals, units, and staffs for the new strategic environment, and to provide enabling tools and processes to carry out missions.

Joint Knowledge Development and Distribution Capability—Will prepare future decision-makers and leaders to employ joint operational art, understand the common relevant operating picture, and respond innovatively to adversaries. It will develop and distribute joint knowledge via a dynamic, global-knowledge network that provides immediate access to joint education and training resources.

Joint National Training Capability—Will prepare forces by providing command staffs and units with an integrated live, virtual, and constructive training environment that includes appropriate joint context, and allows global training and mission rehearsal in support of specific operational needs.

Joint Assessment and Enabling Capability—Will assist leaders in assessing the value of transformational initiatives on individuals, organizations, and processes by evaluating the level of joint force readiness to meet validated combatant commander requirements. It will also provide essential support tools and processes to enable and enhance the Joint Knowledge Development and Distribution Capability and the Joint National Training Capability.

Through these three capabilities, combatant commanders—the ultimate focal points for joint operations—will receive better prepared forces that are aligned with their needs.

The Under Secretary of Defense for Personnel and Readiness retains overall responsibility for Training Transformation. The Training Transformation Executive Steering Group, the Training Transformation Senior Advisory Group, and the Joint Integrated Process Team will oversee the execution and updates of the *Training Transformation Implementation Plan*. New management processes will use spiral development and periodic block assessments to review, assess, adjust, and redirect the actions that will collectively transform Department of Defense training.

This plan describes why Training Transformation is vital to joint force readiness and guides the development of capabilities for transforming future joint operations. Appendix 1 addresses the actions identified in the *Strategic Plan for Transforming DoD Training*. It also provides specific details and milestones for outlining how and when actions are accomplished and specifies organizational responsibility for these actions. The *Training Transformation Implementation Plan* will be revised periodically to remain aligned with evolving assumptions, new developments, and emerging requirements.

1.0 NEED AND CONTEXT

1.1. Challenge

The dramatic transformation of America's strategic environment demands an equally dramatic transformation in how we prepare our military forces for combat and noncombat operations. For more than 40 years, we prepared to defeat a known enemy, with known doctrine and order of battle, on known terrain supported by a modern European infrastructure. Today's force prepares primarily for force projection operations against conventional and unconventional forces in a wide variety of undeveloped and unfamiliar theaters of operations. While previously we prepared to defend against the forces of a great, known power, today we must defend the homeland against nonstate actors employing unconventional means, including weapons of mass destruction. Today's combatant commanders are charged with conducting military operations in this challenging new environment, and the force must be prepared accordingly.

1.2. Force Implication

This transformed strategic environment has had a major impact on the joint force commander. Emphasis has shifted from deliberate to adaptive war planning, and from permanent organizations and large hierarchies to smaller, highly-distributed joint and combined forces and standing joint task forces that integrate service capabilities at the lowest levels. In addition, reliance on the Reserve component has shifted from that of a strategic reserve to being a prominent part of the deployable force.

1.3. Training Implication

This strategic shift has a correlated, immediate impact on the training that supports joint force readiness, and must be viewed from an entirely new perspective. To be effective and support the needs of combatant commanders in the new strategic environment, training must undergo dramatic transformation. Training must emphasize crisis-action planning, joint force organization, and mission rehearsal. It must prepare the force to learn, improvise, and adapt to constantly changing threats in addition to executing doctrine to standards. It also must accommodate the unique training requirements of active and Reserve components to assure total force readiness. In the Department's *Transformation Planning Guidance*, Secretary Rumsfeld stated, "We must transform not only the capabilities at our disposal, but also the way we think, the way we train, the way we exercise, and the way we fight." The Training Transformation initiative is designed to provide dynamic, capabilities-based training for the Department of Defense in support of national security requirements across active and Reserve components of the Services; Federal agencies; international coalitions; international organizations; and state, local, and nongovernmental organizations.

1.4. Training Transformation Objectives

Training Transformation is a continuous process designed to ensure that all individuals, units, and organizations, both military and civilian, receive the joint education and training necessary

to accomplish the joint tasks that support the operational needs of combatant commanders. Training Transformation will accomplish the following objectives:

- Strengthen joint operations by preparing forces for new warfighting concepts
- Continuously improve joint force readiness by aligning joint education and training capabilities and resources with combatant command needs
- Develop individuals and organizations that intuitively think jointly
- Develop individuals and organizations that improvise and adapt to emerging crises
- Achieve unity of effort from a diversity of means

Diversity of means are drawn from active and Reserve components of the Services; Federal agencies; international coalitions; international organizations; and state, local, and nongovernmental organizations. The new strategic environment requires orchestration of this wider diversity of means and a broader, more inclusive definition of “jointness.”

As the Department transforms military training, it must preserve the existing high standards of excellence in Service core-skills training, and apply these skills to build joint capabilities across the Department of Defense.

1.5. Transformational Capabilities

Achievement of these objectives requires the creation and storage of new knowledge for future military operations, imparting this knowledge to individuals through education, and applying it to individuals and collectives (units and staffs) through the Joint Training System—an integrated framework to prioritize, plan, execute, and assess training requirements. The challenge is to integrate joint training into a joint knowledge management architecture. This will be achieved through the development and application of the following three capabilities that form the foundation for Training Transformation:

- **Joint Knowledge Development and Distribution Capability**—Will drive the transformation of our military forces using the power of information by creating, storing, imparting, and applying knowledge to enhance an individual’s ability to think intuitively joint. It will prepare future decision-makers and leaders to employ joint operational art, understand the common relevant operating picture, and respond innovatively to adversaries. It will develop and distribute joint knowledge via a dynamic, global-knowledge network that provides immediate access to joint education and training resources. Refer to Section 2.0 for additional detail.
- **Joint National Training Capability**—Will drive the transformation of our military forces by creating, storing, imparting, and applying knowledge in improved ways to units and staffs. It will also prepare forces by providing command staffs and units with an integrated live, virtual, and constructive training environment with appropriate joint context that allows accurate, timely, and relevant training and mission rehearsal in support of specific operational needs. Refer to Section 3.0 for additional detail.
- **Joint Assessment and Enabling Capability**—Will assist leaders in assessing the results of transformational initiatives on individuals, organizations, and processes by evaluating the

level of joint force readiness to meet validated combatant commander requirements. It will also provide essential support tools and processes to enable and enhance the two aforementioned capabilities. Refer to Section 4.0 for additional detail.

1.6. Rapid Spiral Transformation

The Department instituted evolutionary acquisition and spiral development initiatives to reduce cycle time and increase speed of delivery of advanced capabilities to our warfighters. Evolutionary acquisition defines, develops, produces or acquires, and fields incremental blocks of capability through an interactive process among users, testers, and developers. Training Transformation will be accomplished using the "build-a-little, test-a-little" approach known as rapid spiral development. This plan describes an incremental block development approach with formal program assessments every two years to measure impacts on joint force readiness and guide subsequent investments in Training Transformation capabilities.

1.7. Implementation Plan Overview

The *Training Transformation Implementation Plan* implements the vision and actions of the approved 2002 *Strategic Plan for Transforming DoD Training*. It also explains why Training Transformation is vital to joint force readiness, and guides the development of capabilities for transforming future joint operations. Sections 2.0, 3.0, and 4.0 describe each of the Training Transformation capabilities. Section 5.0 outlines the management and oversight of Training Transformation and resource management. Appendix 1 outlines how and when actions will be accomplished by providing details, milestones, and organizational responsibilities. Appendix 2 provides a list of acronyms. Appendix 3 will address the resource management process no later than December 2003. The *Training Transformation Implementation Plan* will be revised periodically to remain aligned with evolving assumptions, new developments, and emerging requirements.

2.0 JOINT KNOWLEDGE DEVELOPMENT AND DISTRIBUTION CAPABILITY

2.1. Concept

Current and future joint forces must be multiskilled and multidimensional, and possess the intellectual capability to think intuitively joint. The intellectual interoperability required to meld service capabilities into an inherently joint force comes from a mastery of the joint operational art. Future joint force leaders must strive to reach new joint education and training standards by continually improving individual knowledge, skills, and abilities to achieve desired effects in decisive operations. Training Transformation leverages the use of knowledge to improve joint force readiness by enabling personnel to think in terms of joint concepts, and by building upon Service education and training foundations.

The Joint Knowledge Development and Distribution Capability will drive the transformation of our military forces using the power of information by creating, storing, imparting, and applying knowledge to enhance an individual's ability to think intuitively joint. It will provide rapid and seamless flow and exchange of knowledge across the joint community. As suggested by the *Transformation Planning Guidance*, this capability facilitates a transformed culture by preparing future decision-makers and leaders (officers, enlisted, and DoD civilians across the joint community) to employ joint operational art, understand the common relevant operating picture, and respond innovatively to adversaries. It will also dramatically enhance the joint warfighter's ability to leverage knowledge and transform it into combat power.

The Joint Knowledge Development and Distribution Capability will leverage state-of-the-art distribution processes to provide DoD personnel with the education and training resources needed anytime, anywhere. This capability will also ensure that subject-matter expertise is immediately available to an on-scene commander, first responder, and other users. Examples of such expertise include military war college instructors and experts in the areas of language, culture, science, strategy, and planning. Knowledge—in the form of education, learning, training, and human expertise—will be distributed via a network-centric, knowledge-based, joint architecture that is interoperable with the Joint Training System. This architecture will provide a framework for immediate access to education and training resources. Centralized development and management, and decentralized execution of the Joint Knowledge Development and Distribution Capability will capitalize on our nation's advanced information technology resources and harness these technologies for the joint community.

The subsections below describe the initiatives required to enable this capability.

2.2. Joint Individual Development Initiative

The Joint Individual Development Initiative creates a career-long continuum of knowledge that integrates individual functional career knowledge with individual joint and service specialties. The continuum implements knowledge management processes within a framework of capabilities based on combatant commander needs. The methodology for this initiative is based

on joint individual tasks required to perform joint operations. These tasks are then organized to form joint core competencies and analyzed for best delivery methodology within this initiative.

A goal of this initiative is to improve individual combat proficiency and effectiveness. This will be achieved when personnel are developed according to a joint learning continuum, acquiring and performing higher-level skills within a joint knowledge management architecture. Future development requires integration of individual knowledge-development needs with new technologies to create a continuum of joint learning. Such learning transforms education and training into a joint-centric learning environment.

The Joint Individual Development Initiative will create a Joint Operational Training program to provide management and oversight of joint training development. It will also capitalize on the Joint Professional Military Education program, and existing and emerging technologies and concepts to implement Training Transformation.

2.3. Joint Distributed Learning Initiative

As part of the Training Transformation effort, the Advanced Distributed Learning Initiative will refocus to enable joint distributed learning. The Advanced Distributed Learning Initiative and Co-Laboratories were established in response to the Quadrennial Defense Review's commitment to modernize DoD training and enhance collaboration with the private sector. The goal of the Joint Distributed Learning Initiative is to ensure ready access to high-quality "learning" for joint education and training, performance-aiding, and decision-aiding that is tailored to the needs and capabilities of any individual or group, and available anytime, anywhere. In pursuing the goals of Training Transformation and leveraging existing and future capabilities, the Joint Distributed Learning Initiative will build upon previous work with the Services and industry to create an interoperable learning environment.

The Joint Distributed Learning Initiative will support the Joint Knowledge Development and Distribution Capability with the following functions:

- Integration of Web-based learning and operational applications. Joint distributed learning will provide a common knowledge base for joint education and training, and for job performance aids that coordinate and leverage the tools, technologies, and methodologies associated with these disciplines and processes.
- Personnel competency, certification, and skill-level tracking. Applications will possess detailed information on the competencies, certifications, and skill levels of individuals to model the capabilities of users. This information will feed into personnel and other data systems to support the tracking and selection of joint qualified individuals and the rapid assembly of units for joint operations.
- Collaborative environments and learning management tools. The Joint Distributed Learning Initiative will foster a collaborative environment that leverages the expertise and tools resident in DoD education and training institutions and research facilities.

2.4. Joint Management Office and Advisory Group for the Joint Knowledge Development and Distribution Capability

The Chairman, Joint Chiefs of Staff, will establish a Joint Management Office to manage and oversee the rapid spiral development of joint individual education and training by:

- Collecting and consolidating combatant commander requirements for individual joint knowledge and skills
- Developing common learning objectives for joint operational art and concepts
- Developing common metrics for joint certification and accreditation of individuals
- Developing joint education and training prototype content, tools, and services
- Distributing and assessing joint education and training prototype content, tools, and services
- Transitioning research and development efforts to the implementing organizations

The Joint Management Office will include program managers and personnel from the implementing organizations such as Joint Forces Command, Special Operations Command, National Defense University, and regional centers. The Co-Laboratory in Alexandria, Virginia will be restructured to serve as the location for the Joint Knowledge Development and Distribution Capability Joint Management Office. Research and development efforts will be refocused to provide comprehensive technical and operational support to the Joint Knowledge Development and Distribution Capability Joint Management Office. The Joint Management Office will leverage existing programs, such as the Regional Security Cooperation Network to assist in the development of the multinational aspects of the Joint Knowledge Development and Distribution Capability.

The Chairman, Joint Chiefs of Staff, will establish a Joint Knowledge Development and Distribution Capability Advisory Group with representatives from the Office of the Secretary of Defense, Joint Forces Command, Special Operations Command, other combatant commands, Services, National Defense University, senior service colleges, and the Special Operations University to guide the development, distribution, and management of Joint Knowledge Development and Distribution Capability applications. This Advisory Group will develop and prioritize requirements in accordance with pre-coordinated and approved criteria and procedures. In addition, the Advisory Group will coordinate the development and implementation of common methods to certify individual competency of active and Reserve component members in the joint operational art and the integration of the Joint Knowledge Development and Distribution Capability with existing programs of DoD education and training institutions.

2.5. Joint Knowledge Development and Distribution Capability Programs

The Chairman, Joint Chiefs of Staff, will appoint managers to oversee the development, distribution, and lifecycle management of the Joint Professional Military Education and Joint Operational Training programs. The program managers will draw upon program resources for the analysis, design, development, implementation, and revision of instructional content associated with these programs. The Joint Knowledge Development and Distribution Capability

will integrate with the joint knowledge management architecture through the Joint Training System.

The managers will coordinate requirements for the expansion of Joint Knowledge Development and Distribution Capability applications to support the joint education and training needs of interagency, intergovernmental, and multinational partners by working with the Office of the Secretary of Defense, combatant commanders, Services, National Defense University, senior service colleges, the Special Operations University, and the National Guard Bureau. Managers will routinely coordinate program requirements and functional characteristics with representatives of combatant commanders through the Worldwide Joint Training Conference and a Web-based Joint Knowledge Development and Distribution Capability collaborative forum.

Successful development and global distribution of the Joint Knowledge Development and Distribution Capability applications require use of open-architecture standards and consistent methods for design, delivery, storage, tracking, and management of knowledge resources. A significant portion of these requirements will be supported by the Joint Distributed Learning Initiative in accordance with the terms of a memorandum of agreement between participating organizations.

A technical team from the Co-Laboratory in Alexandria, Virginia will support these programs by providing common tools and support environments, decision support aids, user help desk, collaborative environment, network services, digital libraries (repositories), and digital game engines.

2.6. Milestones

A major capability milestone mandated by the *Strategic Plan for Transforming DoD Training* and detailed in Appendix 1, Section 2.0 is:

- Create an initial Web-based curriculum for Joint Military Leader Development by January 2004

Major capability milestones that will be incorporated in the next iteration of Appendix 1 include:

- Establish a Joint Management Office to manage and oversee major areas of the Joint Knowledge Development and Distribution Capability and an Advisory Group to guide and coordinate its development by October 2003
- Align Joint Distributed Learning initiatives to support Joint Knowledge Development and Distribution Capability functions by October 2003
- Create initial Web-based delivery capability for joint individual education and training resources by February 2005
- Transition initial joint education and training prototype efforts to the implementing organizations by March 2006, and to international coalition partners, international organizations, and nongovernmental organizations by October 2009

3.0 JOINT NATIONAL TRAINING CAPABILITY

3.1. Concept

Building on the training transformation of the 1970s, the Joint National Training Capability will provide an environment for realistic joint exercises against aggressive, free-playing opposing forces, with credible feedback. The Joint National Training Capability is based on an integrated live, virtual, and constructive simulation environment that is available globally on a 24-hour basis, and linked to real-world command and control systems. The Joint National Training Capability can be used to train forces against a general threat, to conduct mission rehearsal against a specific threat, or to experiment with new doctrine, tactics, techniques, procedures, Joint Operational Concepts, and equipment.

The Joint National Training Capability, as the integrating environment, will provide training to the full complement of defense audiences. Active and Reserve forces from a single Service will be able to train in a realistic joint context, with other Service forces and joint battle staffs represented with extensive simulation support. Battle staffs from joint headquarters, component headquarters, and service tactical headquarters will train and rehearse using real-world command and control systems, with tactical forces represented with extensive simulation support. The Joint National Training Capability will evolve to encompass a larger training audience, including coalition partners and Federal, state, local, and nongovernmental agencies. These integrating environments are codified in the following Joint National Training Capability thrusts:

- Thrust 1: Improved Horizontal Training—Build on existing service interoperability training
- Thrust 2: Improved Vertical Training—Link component and joint command and staff planning and execution
- Thrust 3: Integration Exercises—Enhance existing joint exercises to address joint interoperability training in a joint context
- Thrust 4: Functional Training—Provide dedicated joint training environment for functional warfighting and complex joint tasks

The subsections below describe the initiatives required to enable this capability.

3.2. Architecture Initiative for Live, Virtual, and Constructive Simulations

Common operational, technical, and system architectures will be developed and adopted to allow integrated live, virtual, and constructive simulations to interoperate regardless of Service provider. A six-month policy review and assessment period will be established for the examination of current policies that impact the development of the Joint National Training Capability and the linkage of integrated live, virtual, and constructive simulations for training, experimentation, and mission rehearsal. Following the review and assessment period, a one-year policy-establishment period will be implemented to produce DoD policy to guide departmental efforts, including the Joint National Training Capability, to conform to the Global Joint Training

Infrastructure plan. Developed policies will provide broad guidance on range modernization and sustainment, and embedded training capabilities.

Through the execution of a Joint National Training Capability systems-engineering and configuration-management development process, a global, multinational network of constructive computer simulations, man-in-the-loop virtual simulators, and live forces at instrumented ranges will provide a training and mission rehearsal environment that supports a broad spectrum of joint and service training. Through a robust research and development partnership incorporating science and technology initiatives, the Joint National Training Capability will assist in the modernization of ranges and in improving infrastructure through execution of the Global Joint Training Infrastructure plan. The Global Joint Training Infrastructure development processes will remain open to incorporate state-of-the-art technology from industry, the Department of Defense, and other governmental sources in support of the Joint National Training Capability.

3.3. Range Modernization Initiative

The Services maintain training ranges and operating areas necessary to satisfy core service training requirements. This frequently results in the development and fielding of unique instrumentation for the operating platforms, and a wide variety of infrastructure necessary to create the training environment, capture “ground truth,” assess activity and performance, and provide feedback to the training audience in a timely manner. Examples include position information collection systems, weapons scoring, threat emitters, and other opposition force equipment, communications, and exercise surveillance and support systems. Providing and modernizing such training functionality and capabilities are the responsibilities of the Services.

These established capabilities form the baseline of a modern range infrastructure. It is this baseline that forms the foundation of the Joint National Training Capability, from which Joint National Training Capability investments will selectively expand and connect service training ranges and instrumentation systems to create joint capabilities. An example would be adding the systems for fixed-wing aircraft tracking and weapon-engagement scoring to the infrastructure at an Army range to enable accredited, joint training events. Occasionally, modifications will be required to service training-support systems to incorporate joint functionality.

3.4. Sustainable Ranges Initiative

Military ranges and operating areas are fundamental enablers of unit training, be it basic or advanced, service or joint. Encroachment pressures—such as private development adjacent to ranges, restrictions imposed by environmental regulation, or growing competition for airspace and frequency spectrum—are increasingly impeding the ability to conduct unit training in realistic environments. Encroachment pressures limit low-altitude flight training, over-the-beach operations, night and all-weather training, live-fire training, and the application of new weapon technologies.

The Department is pursuing a comprehensive solution to encroachment pressures through the Sustainable Ranges Initiative. This initiative includes policy, organization and leadership, programming, outreach, legislative clarification, and a suite of internal changes to foster range sustainment. Department of Defense policy directives have been or are being prepared to

promote a long-range, sustainable approach to range management. The Office of the Secretary of Defense and the Services are taking a proactive role in developing programs to protect facilities from urbanization, and working with states and nongovernmental organizations to promote sound land usage. The sustainable ranges outreach effort encourages stakeholders to improve understanding of readiness needs among affected groups, address concerns of state and local governments and surrounding communities, work with nongovernmental organizations on areas of common interest, and to partner with groups outside the Department of Defense to reach common goals. Where possible, the Department is seeking administrative and regulatory solutions to issues where mutually acceptable courses of action can be determined by working with other Federal or state agencies.

3.5. Embedded Training in Major Defense Acquisition Programs Initiative

Embedded training in Major Defense Acquisition Programs must be designed and fielded to integrate immediately into the Global Joint Training Infrastructure. Deployed forces must have the ability to sustain readiness through training and rehearsal, regardless of location or length of deployment. To support this initiative, existing defense acquisition and training policies that influence Major Defense Acquisition Programs will be reviewed and assessed, and changes to policies and procedures will be made as needed.

The new or revised policies will provide an embedded training capability in targeted Major Defense Acquisition Programs that includes human performance-aiding capabilities within operational systems. Embedded training capabilities will be consistent with joint operational and joint training architectures, and will be achieved using real-world command and control systems. Embedded training will be tracked in a manner similar to “key performance parameters” throughout the acquisition process. Through embedded training and deployable training infrastructure, forces will be able to train globally, and manage and assess readiness regardless of location or duration of deployed operations. Service sponsors for existing and future Major Defense Acquisition Programs, with maximum participation from the training community, will fund and conduct assessments to determine whether or not requirements for embedded training are identified, and if so, whether they are adequately expressed and resourced to meet the stated need. If not, and applying embedded training is deemed advisable, the appropriate service sponsor will resource and take appropriate corrective action.

3.6. Joint Force Trainer Community and Joint National Training Capability Joint Management Office

In late 2002, United States Joint Forces Command established the transformative Joint Force Trainer community, a comprehensive network of Joint Force training-associated activities.

The core of the Joint Force Trainer community is the Joint Warfighting Center. The Joint Warfighting Center was initially structured and resourced to provide four-phase (requirements, planning, execution, and assessment) Joint Training System support to the warfighter’s current joint-capable forces and joint-force capability requirements. In keeping with the Joint Forces Command’s and the Joint Force Trainer’s transformation responsibilities, the Joint Warfighting

Center now complements current capability development with aggressive assessment of joint training-based activity to identify, develop, and integrate near-term joint force capability improvement. The results of assessment (single combatant command) and meta-assessment (all combatant commands) are training-based joint warfighter capability improvement initiatives identified as joint warfighting deficiencies captured for integration into the Joint Training System, and managed through the Transformational Change Package (the doctrine, operations, training, materiel, leadership, personnel, facilities format) process for implementation.

The Joint Force Trainer community facilitates the implementation of the Joint Forces Command capability integration activity, incorporating the ongoing efforts of the Joint Battle Center, Joint Battle Management Command and Control initiative, and the Standing Joint Force Headquarters (prototype) into training activities. In addition, the Joint Force Trainer will integrate into the force positive outcomes of Joint Test and Evaluation, Advanced Concepts Technology Demonstrations, joint and service experimentation and prototyping, and lessons learned from forces in real-world operations.

The Joint National Training Capability provides the principle vehicle for joint force training. Implementation of the Joint National Training Capability will directly benefit the combatant commanders through the scalable integration of live, virtual, and constructive environments made available in a robust joint context, and by drawing on the Joint Operational Concepts. With an appropriate joint context, combatant commanders will have access to consistent measures of effectiveness in terms of how their organizations perform against standard joint operational requirements. Commanders also will be able to choose certified Joint National Training Capability sites that can provide accredited training on specific joint tasks.

The Joint National Training Capability Joint Management Office will be a fully integrated responsibility of the Joint Forces Command Joint Force Trainer community. It will leverage existing Joint Force Trainer capabilities, and resource the development of additional Joint Force Trainer capabilities to meet specific Joint National Training Capability outcome requirements. In this context, the Joint Management Office will collect, merge, and validate Joint National Training Capability requirements, and manage and oversee programmatic functions. Additionally, it will develop processes and standards to certify Joint National Training Capability sites and training support systems, and accredit Joint National Training Capability events. The Joint Management Office will use existing Joint Force Trainer execution capabilities to develop and manage processes that gain input from and build consensus among combatant commands, Services, combat support agencies, and other DoD and governmental organizations. The Joint Management Office will oversee integration of range modernization; range sustainment; architectural initiatives for live, virtual, and constructive simulations; and embedded training in Major Defense Acquisition Programs.

Science and technology breakthroughs will also be leveraged to improve training. Development processes will be established to ensure that the training audience is equipped with current technology. The Joint National Training Capability Joint Management Office will continue to define operational joint training requirements, which will then be supported by the latest systems and technical solutions that accommodate combatant command, combat support agency, and service requirements.

3.7. Milestones

Major capability milestones mandated by the *Strategic Plan for Transforming DoD Training* or the *Defense Planning Guidance* and detailed in Appendix 1, Section 3.0 are:

- Provide joint context with command, control, communications, computer, intelligence, surveillance, and reconnaissance to major service training events and joint command and staff training events by October 2005
- Use the Joint Training System to link lessons learned from military operations, joint training, experimentation, and testing to the development and assessment of joint operational capabilities by October 2005
- Assess all Joint Training Tasks biannually in a joint context in selected joint exercises by October 2007
- Conduct specifically-designed major transformation events with complex tasks in a joint context to assess systematically the joint operational capabilities by October 2007
- Conduct a multinational Joint National Training Capability event by October 2007
- Demonstrate a deployable Joint National Training Capability, and mission rehearsal capabilities by October 2007
- Train joint forces to conduct operations in key transformation mission areas by October 2009
- Conduct and analyze joint and interoperability training with lessons learned leading to improvements across the spectrum of doctrine, organization, training, materiel, leadership, personnel, and facilities by October 2009
- Establish fully-trained Standing Joint Force Headquarters with functional components by October 2009

A major capability milestone that will be incorporated in the next iteration of Appendix 1 is:

- Create an initial Web-based delivery capability for operational planning and mission rehearsal by October 2005

4.0 JOINT ASSESSMENT AND ENABLING CAPABILITY

4.1. Concept

The Joint Assessment and Enabling Capability will ensure systematic assessment of Training Transformation plans, programs, and investments throughout the Department; and continuous improvement of joint force readiness. It will also provide essential enabling tools and processes to support and guide the rapid spiral development of the Joint Knowledge Development and Distribution Capability and the Joint National Training Capability. This capability will provide an assessment process to measure the degree to which training improves joint force readiness, both individually and collectively.

The subsections below describe the initiatives required to enable this capability.

4.2. Assessment Initiatives

Enhanced Joint Training System

While the Services have long had robust training development, execution, and assessment constructs, the same is not true for the joint force. The Joint Training System was designed to emphasize joint training as necessary to fulfill the mission essential capability requirements of the combatant commands, while enhancing the Services' core competencies. The Training Transformation initiative seeks to strengthen and broaden the focus of the Joint Training System and increase the priority of joint training in the Department of Defense by using the Joint Training System methodology as the foundation for service, Federal agency, intergovernmental, and multinational training programs.

The Joint Training System will serve as the architectural framework for Training Transformation by systematically identifying and updating joint operational requirements for specific mission-planning, mission-rehearsal, experimentation, education, and training needs that will be supported by the Joint Knowledge Development and Distribution Capability and Joint National Training Capability. Similarly, the Joint Training System will provide the foundation for the Joint Assessment and Enabling Capability. With enhancement, the Joint Training System will link combatant commander requirements (input) with performance measures (output) and guide Training Transformation assessments and investments throughout the spiral development process.

Performance Assessment Architecture

The Joint Assessment and Enabling Capability requires a new emphasis on architecture as the guiding principle for the integration and transformation of existing DoD training simulations, instrumented ranges, and distributed learning systems. This Performance Assessment Architecture will complement Joint Knowledge Development and Distribution Capability and Joint National Training Capability architecture efforts, and incorporate common assessment tools and metrics in its operational software and global information environment.

This effort will begin with the formation of a Performance Assessment Architecture Advisory Group that will oversee the development of a Training Transformation Performance Assessment Architecture and a Training Transformation baseline architecture comprised of existing and emerging DoD training systems, instrumented ranges, and distributed learning programs. A plan will be developed to guide evolution and integration across Training Transformation efforts and will include: developing new automated performance assessment tools and analysis techniques; developing and embedding performance measures in the Joint Knowledge Development and Distribution Capability and Joint National Training Capability; establishing performance-assessment repositories and instituting procedures to capture, organize, and manage this information; and verifying and validating Joint Assessment and Enabling Capability metrics and overall system effectiveness.

Joint Performance Measures

The quality and sophistication of Joint Assessment and Enabling Capability metrics and assessment tools will evolve as a result of the rapid spiral transformation process. Feedback of performance measurement information from the Joint Assessment and Enabling Capability will be used to guide the evolution of the Joint Knowledge Development and Distribution Capability and Joint National Training Capability.

The initial set of metrics will be derived from existing tasks, conditions, and measures resident in the Universal Joint Task List. The first, basic level of spiral, capabilities-based assessment of individuals and units involves predictable capabilities required for joint operations. It applies to operations and missions that can be reasonably anticipated in advance. Metrics for this level are fairly well understood, although rarely implemented fully or routinely in practice.

The second level of metrics pertains to unforeseen capabilities that are likely to arise unexpectedly. This adaptive level addresses the ability of individuals and units to expect the unexpected and be prepared to deal with it. Metrics for this level are keyed to more abstract and less understood capabilities. This adaptive level is focused on the ability to quickly acquire on-demand, unanticipated mission-level capabilities that are aligned with the cognitive agility and innovative abilities of individuals and units.

Initial areas of Joint Assessment and Enabling Capability for measuring and reporting the preparation of individuals and units are detailed in Section 4.0, Joint Performance Measures, of Appendix 1.

Link Training to Readiness through the Joint Assessment and Enabling Capability

Training is essential to joint force readiness. Intellectual interoperability is a key component of readiness for joint operations and consists of joint knowledge and experience transmitted and reinforced through joint education and training. The challenge is to develop more accurate and insightful methods for measuring the effectiveness of joint education and training on performance of joint operations.

Future joint force training readiness reporting through the Defense Readiness Reporting System will be based on the process established in the Joint Training System. The Joint Assessment and

Enabling Capability will be used to provide more robust reporting in terms of doctrine, organization, training, materiel, leadership, personnel, and facilities. Such reporting will include two levels of spiral development—a basic level for predictable requirements, and a second level to assess individual and unit trainability and adaptability for unforeseen exigencies. The goal of the Defense Readiness Reporting System is to expand readiness reporting to include all missions assigned or implied by the Secretary of Defense to DoD components. These missions include major combat operations, smaller-scale contingencies, military operations other than war, and theater security cooperation programs. The focus of the readiness reporting system will be on the joint mission essential tasks of the combatant commanders.

Joint Lessons-Learned Program

The Secretary of Defense, the Chairman of the Joint Chiefs of Staff, and the *Defense Planning Guidance* have highlighted the importance of an effective joint lessons-learned program. The *Strategic Plan for Transforming DoD Training* identifies the need to ensure that lessons learned are integrated into the development of new training processes and systems.

Training Transformation requires a correlating transformation of the lessons-learned process drawn from operational missions and training venues. Lessons learned from operational missions must be systematically captured and injected into ongoing experimentation and concept development to generate new joint tactics, techniques, and procedures. Combatant commanders will develop war plans and defense security cooperation plans, taking into account lessons learned from ongoing and past operations. Lessons learned derived from joint training venues will serve as principal sources for the design of future joint education and training curricula, courseware, training events, operational tests, experimental concepts, and warfighter operations. The active collection, analysis, dissemination, and use of operational and training-related lessons learned are required for improved joint force readiness.

A key component of the Joint Lessons Learned Program—the Joint Center for Lessons Learned—identifies strategic trends and issues, and performs analysis in joint warfighting deficiencies. This center, coupled with the Joint Lessons Learned Specialist element, is the foundation of a network of lessons-learned experts from combatant commands, Joint Staff, Services, combat support agencies, and education institutions who work together to provide corrective feedback from joint operations, training exercises, and experimentation.

4.3. Enabling Initiatives

Guidance and Policy

Training Transformation initiatives must be codified in DoD policy. Policy ensures that the initiatives are institutionalized within the Department of Defense, provides guidance for planning and execution of Training Transformation programs, and provides procedures and assigns responsibilities for the training and management of DoD personnel—both military and civilian—and military units. Policy promotes the effective integration of activities across Training Transformation to minimize duplication of effort and focus on priorities. Training Transformation must address the following guidance and policy areas:

- Personnel and assignments
- Education, training, and experimentation
- National training strategy, policy, and programs
- Resource management and oversight
- Embedding training into defense acquisitions
- Range modernization and sustainment
- Assessing joint education and training, and reporting readiness
- Linking training requirements vertically and horizontally across organizations
- Interoperability of training systems, infrastructure, and networks

Track Joint Education, Training, and Experience of DoD Personnel

Joint education, training, and experience requirements and accomplishments must be tracked as jointness is integrated into DoD personnel and cultures. This tracking encompasses accurately describing joint billet and leadership requirements, developing appropriate standards and certification processes, and ensuring that personnel systems assign the right individuals to the right billets at the right time.

Quality leader development is one of the key elements of mission success and is the cumulative result of lifelong education, training, experience, and self-development processes. Therefore, it is critical that future joint leaders are fully developed and prepared for joint warfighting.

4.4. Milestones

Major capability milestones mandated by the *Strategic Plan for Transforming DoD Training* and detailed in Appendix 1, Section 4.0 are:

- Track joint education, training, and experience of all DoD personnel by October 2005
- Link joint training to the Defense Readiness Reporting System network by March 2006
- Ensure that all DoD forces are trained prior to and during deployment by October 2007

Major capability milestones that will be incorporated in the next iteration of Appendix 1 include:

- Develop a Performance Assessment Architecture by October 2004
- Create an initial Web-based Joint Lessons Learned Network for DoD users by October 2004
- Develop standard Training Transformation metrics by January 2005
- Produce an initial block assessment report by October 2005
- Ensure that all joint training and exercises in support of combatant commander requirements are measured and reported by October 2007

5.0 TRAINING TRANSFORMATION MANAGEMENT AND OVERSIGHT

5.1. Management Responsibilities

Training Transformation is a continually evolving process that requires management of the overall direction while adjusting for new developments to achieve Training Transformation objectives. The management process uses spiral development to review, assess, adjust, and redirect the actions that will collectively transform DoD training.

The Under Secretary of Defense for Personnel and Readiness maintains overall responsibility for Training Transformation. The Deputy Under Secretary of Defense for Readiness serves as the Executive Agent for Training Transformation. The Director of Readiness and Training has oversight of Training Transformation progress and management. The Training Transformation Integrator provides overall, daily management and coordination of the Department's Training Transformation activities. This individual also ensures collaboration across the entire Department and guides the efforts of the Joint Integrated Process Team and Working Groups that oversee implementation of Training Transformation actions.

5.2. Oversight Forums

The Training Transformation Executive Steering Group and the Training Transformation Senior Advisory Group (refer to Figure 1) oversee the development and execution of the *Training Transformation Implementation Plan*.

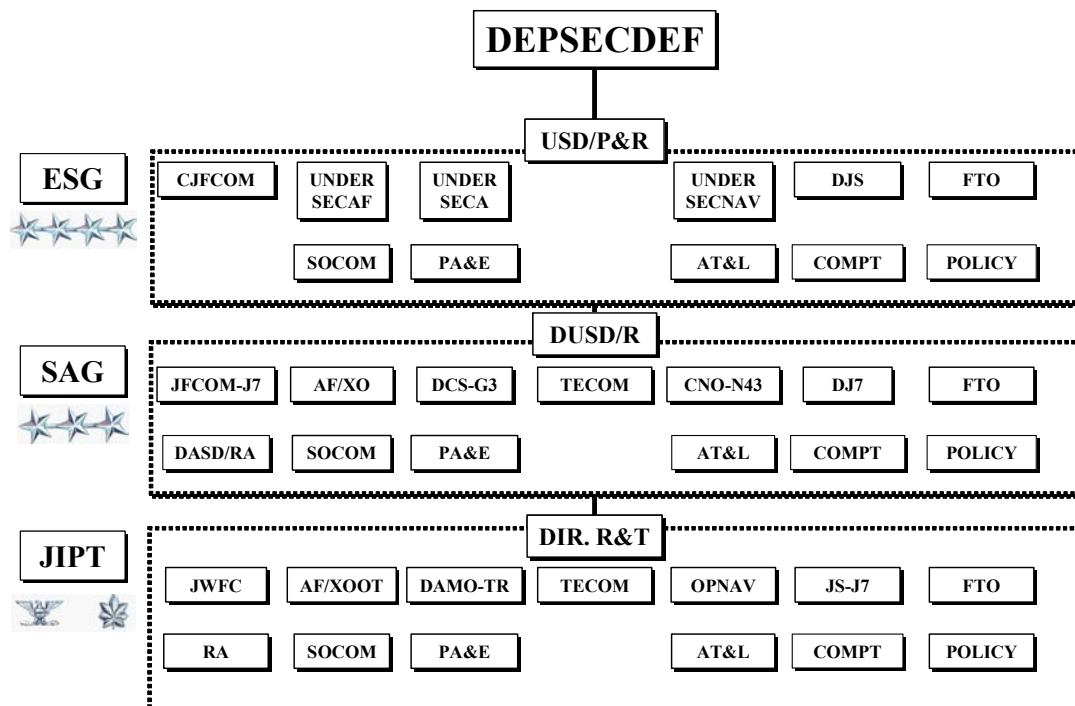


Figure 1. Training Transformation Oversight

These two governing bodies also oversee the resolution of issues and manage the Training Transformation process for the Department. In this regard, they are responsible to the Secretary and Deputy Secretary of Defense for the development of a *Training Transformation Implementation Plan* and for overseeing the actuation of Training Transformation. Additionally, the Senior Advisory Group ensures the timely allocation, transfer, and execution of Training Transformation program resources.

The Training Transformation Joint Integrated Process Team is subordinate to the two oversight groups. It serves as the primary, collaborative, working forum that provides input to the oversight groups and responds to their guidance. The Joint Integrated Process Team consists of senior analysts, planners, and action officers from the staffs, agencies, and commands contributing to DoD Training Transformation.

5.3. Training Transformation Resource Management Process

The Secretary of Defense directed that Training Transformation be included in the Fiscal Year 2004 Program Objective Memorandum, and that funds within the Fiscal Year 2003 budget be reprogrammed to accelerate the start of this high-priority program. Oversight responsibility for the Department of Defense Training Transformation initiative, assigned to the Office of the Under Secretary of Defense for Personnel and Readiness, includes program development, coordination of annual budget submissions, and oversight of execution. The Under Secretary of Defense for Personnel and Readiness will utilize the existing Training Transformation Joint Management Office, Joint Integrated Process Team, the Senior Advisory Group, and the Executive Steering Group process and Training Transformation Website to coordinate and oversee the resource management process below:

- The Training Transformation resource management process will include program development, annual budget submissions, and program execution
- Management Initiative Decision 906 is the resource baseline for Training Transformation
- Each Joint Management Office will work openly with the Services, Chairman of the Joint Chiefs of Staff, Joint Forces Command, Special Operations Command, other combatant commands, Defense Agencies, and Office of the Under Secretary of Defense for Personnel and Readiness (hereafter referred to as DoD components) to define resource needs
- The Joint Management Offices for the Joint National Training Capability and the Joint Knowledge Development and Distribution Capability will serve as the primary focal points for planning, programming, and execution of all resources and events associated with their respective Training Transformation capability. The Joint Management Office for the Joint Knowledge Development and Distribution Capability will temporarily serve as the Joint Management Office for the Joint Assessment and Enabling Capability until a more permanent organizational structure can be put in place
- Each Joint Management Office will provide guidance, direction, and oversight for execution of the approved Training Transformation program plan to ensure coherent integration and synchronization of all Training Transformation resources authorized by Management Initiative Decision 906 and subsequent Training Transformation programs that are approved

by the Executive Steering Group; and provide program execution information at the appropriation and program-element aggregate level to the Deputy Under Secretary of Defense for Readiness each quarter with the first report due June 30, 2003

- The Deputy Under Secretary of Defense for Readiness will assess the quarterly progress reports and proposed program updates submitted by each Joint Management Office and monitor progress on the overarching Training Transformation program
- The Deputy Under Secretary of Defense for Readiness will arrange meetings with the Joint Integrated Process Team, the Senior Advisory Group, and the Executive Steering Group to review progress and coordinate approval for Training Transformation resources and updated plans
- The Department of Defense components will ensure their individual programming and budget submissions are consistent with the Executive Steering Group-approved plan, and will report execution-level detail on their specific tasks to the appropriate Joint Management Office
- The Department of Defense components will not internally reprogram Training Transformation resources or redirect them for other purposes without prior consultation with the Under Secretary of Defense (Comptroller) and the Deputy Under Secretary of Defense for Readiness
- The Training Transformation program shall not be exempt from fair-share, across-the-board reductions applied to defense programs for inflation savings, undistributed congressional reductions, management efficiencies, or any similar actions
- The Training Transformation program plan, approved by the Executive Steering Group, will govern execution of funds directly programmed into individual DoD component appropriations as well as funds transferred from Joint Forces Command to the DoD components for execution
- The Under Secretary of Defense (Comptroller), in coordination with the Director of Program Analysis and Evaluation, will review Planning, Programming, and Budgeting System submissions and ensure they support the program plan as approved by the Executive Steering Group
- The Under Secretary of Defense for Personnel and Readiness will publish a timeline to ensure all components have adequate time to incorporate the Training Transformation program plan into their individual program and budget submissions

This process is fully consistent with the Planning, Programming, and Budgeting System and it will remain in effect until officially cancelled or changed.

The Executive Agent will periodically update the *Training Transformation Implementation Plan* to reflect new developments, emerging requirements, implementation progress, and coordination of resources with the Under Secretary of Defense (Comptroller). See Appendix 3 for additional details about the resource management process.